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EXAMINER

KAO, WEI PO ERIC

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,620	Applicant(s) YURUGI ET AL.	
	Examiner WEI-PO KAO	Art Unit 2464	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,8-13 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,8-13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

1. The examiner has acknowledged the amendment made to the claims.

Response to Arguments

2. Applicant's arguments with respect to 1, 4, 6, 8-13 and 15 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments filed on 12/28/2010 have been fully considered but they are not persuasive.

In response to the entire content of the remarks, in particular that the support for the newly amended claim limitation is found at page 19 and 20, the examiner respectfully disagrees. The support is in fact found at pages 22 and 23, step 207. Namely the switching of change-over switches 103 and 113 implies the newly claim limitations.

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In response to the entire content of the remarks, in particular that Dorenbosch does not teach the newly amended claim limitations, a) "... wherein said first wired communication unit and said second wired communication unit begin to communicate ... after wireless data communication between said first wireless unit and said second wireless unit has stopped ... wherein said first wireless communication unit and said second wireless communication unit begin to communicate ... after wired data communication between said first wired unit and said second wired unit has stopped" because paragraph [0045] of Dorenbosch states: "... while the new connection is established, the original connection must remain in operation ...," the examiner respectfully disagrees.

Firstly, Dorenbosch was previously introduced to mainly teach another claim limitations, namely, b) "... a connection control section which: 1) ... and 2)" To do so, a first embodiment of Dorenbosch's disclosure was cited, which is illustrated by figure 2 and paragraphs [0030] to [0034]. Specifically, the particular embodiment teaches all the features in the item b) above except specifically states whether the first connection and the second connection are wired or wireless (see figure 2). Even so, paragraph [0036], which describes the same embodiment, does suggest it. In order to make such feature clearer, figure 6, paragraphs [0042] to [0044] and [0047] to [0048], which illustrate a second embodiment, were cited. Specifically, the paragraphs [0044], [0048] and figure 6 shows that the first connection and second connection can be wired or wireless. In another word, the limitation b) above was rejected by the first embodiment described by the figure 2 and paragraphs [0030] to [0034], not the second embodiment mentioned above. Frankly, without the cited disclosure, figure 6,

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paragraphs [0042] to [0044] and [0047] to [0048], from the second embodiment mentioned above, the cited disclosure, figure 2 and paragraphs [0030] to [0034], from the first embodiment is sufficient to teach the claim limitations b) above. In order to emphasize the point, the particular figure and paragraphs will be deleted in the following rejections. Since the applicants argue based on the teaching in the paragraph [0045], which describes the second embodiment mentioned above, the examiner respectfully asserts that the argument is with error.

Secondly, since the newly presented claim limitations a) are directed to different features when compared with the claim limitations b), a different prior art is considered. (Please see the below rejections for detail.) As a result, the Dorenbosch's teaching is less relevant to the claim limitations a) if not completely irrelevant. For at least such reasoning, the examiner respectfully asserts that the argument is with error.

Claim Rejection - 35 USC § 103

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 6, 8, 9, 10, 11, 12, 13, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al, U.S. Publication No. 2004/0198430 (hereinafter Moriyama) in view of Dorenbosch et al, U.S. Publication No. 2004/0028009 (hereinafter Dorenbosch) and Jones et al, U.S. Patent No. 6137802 (hereinafter Jones).

Regarding Claim 1, Moriyama teaches that **a wireless communication system** (see Abstract, Figure 2, [0002] [0011-0013] [0071]), **comprising: a first communication unit including: a first wireless communication unit** (see Figure 3, [0072-0073] e.g. the processing apparatus) **for performing wireless data communication** (see Figure 3 Element 16 and 30, [0076-0077] i.e. the wireless communication device 16 transmits data over the wireless connection path 30), **a first wired communication unit for performing wired data communication** (see Figure 3 Elements 15 and 20, [0075] [0077] i.e. the wired communication device 15 transmit data over the wired connection path 20) **and a first change-over switch for switching between wireless data communication using said first wireless communication unit and wired data communication using said first wired communication unit** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection; such switch may be implement in software, which functions just like the change-over procedures); **and a second communication unit** (see Figures 4 and 5, [0078] [0080] e.g. the cradle and/or the display device) **including: a second wireless communication**

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unit for performing wireless data communication with said first wireless unit (see Figure 5 Elements 30 and 53, [0081] i.e. the wireless communication device 53 receives data from the wireless communication device 16 in the processing apparatus over the wireless connecting path 30), **a second wired communication unit for performing wired data communication with said first wired communication unit** (see Figure 5 Elements 20 and 52, [0081] i.e. the wired communication device 52 receives data from the wired communication device 15 in the processing apparatus over the wired connection path 20), **and a second change-over switch for switching between wireless data communication using said second wireless communication unit and wired data communication using said second wired communication unit** (see Figures 13, 14 and 15, [0074] [0082] [0105] [0106] [0109] i.e. as indicated by the paragraphs [0074] and [0082] the detachment detector in the display device 50 determines whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 13, 14 and 15 to shift to the wireless connection; such switch may be implement in software, which functions just like the change-over procedures), **wherein said first communication unit further includes: a first wired connection detecting section for detecting whether or not a wired connection for said wired data communication exists between said first wired communication unit and said second wired communication unit** (see Figure 4 Element 42, [0079] i.e. as indicated by the paragraph [0079], the detachment detector detects whether the display device is connected to the processing device or in another word it detects whether a wired connection between the two devices exists); **an application for detecting a wireless connection** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to

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determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection); **wherein said first wired communication unit and said second wired communication unit communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wired connection mode for it to communicate in the wired communication); **and wherein said first wireless communication unit and said second wireless communication unit communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wireless connection mode for it to communicate in the wireless communication).

However, Moriyama does not teach that **a connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit, and 2) responsive to said application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired**

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data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit. Dorenbosch from the same field of endeavor teach that **a connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit** (see Abstract, Figures 1 and 2, Paragraphs [0030-0036] e.g. figure 2 and paragraphs [0034] and [0036]), **and 2) responsive to said application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit** (see paragraphs [0035] and [0036]). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching mechanism (applying the concept of choosing a “better” connection to switch to) as disclosed by Dorenbosch with Moriyama. The motivation would have been that it is desired to provide a better connection between two communication devices to ensure the integrity of time critical traffic (see Dorenbosch, paragraphs [0017]).

Still regarding Claim 1, Moriyama and Dorenbosch teach all the limitations in claim 1 except that **wherein said first wired communication unit and said second wired communication**

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unit begin to communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped; and wherein said first wireless communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication and b) after wired data communication between said first wired unit and said second wired unit has stopped. Even so, the combined teaching of Moriyama and Dorenbosch is sufficient for an ordinary skilled artisan to realize the particular features even it does not specifically teach the features.

Jones from the same field of endeavor helps to make the particular features clear. Jones teaches that **wherein said first wired communication unit and said second wired communication unit begin to communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication** (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wired hardware and column 9 lines 20 to 67 items 7), 10) and 11); the transition from wireless communication to wired communication requires activating the wired hardware) **and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60,

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Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wireless hardware 1004 and column 9 lines 20 to 67 items 7), 10) and 11); to complete the transition from wireless communication to wired communication, deactivating the wireless hardware is further needed; as a result, only the wired medium is available, thus communication is carried out in the wired medium only); **and wherein said first wireless communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wireless hardware and column 9 lines 20 to 67 items 5), 10) and 12); the transition from wired communication to wireless communication requires activating the wireless hardware) **and b) after wired data communication between said first wired unit and said second wired unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wired hardware 1003 and column 9 lines 20 to 67 items 5), 10) and 12); to complete the transition from wired communication to wireless communication, deactivating the wired hardware is further needed; as a result, only the wired medium is available, thus communication is carried out in the wireless medium only). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching apparatus and method disclosed by Jones with Moriyama's system, specifically on both the PC/cradle and monitor. The rationale would have

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been that it is desired to make automatic switching between wired and wireless mediums more robust.

Regarding Claim 4, Moriyama teaches that **A wireless communication unit** (see Abstract, Figure 2, [0002] [0011-0013] [0071]), **comprising: a first communication unit including: a first wireless communication unit** (see Figure 3, [0072-0073] e.g. the processing apparatus) **for performing wireless data communication** (see Figure 3 Element 16 and 30, [0076-0077] i.e. the wireless communication device 16 transmits data over the wireless connection path 30), **a first wired communication unit for performing wired data communication** (see Figure 3 Elements 15 and 20, [0075] [0077] i.e. the wired communication device 15 transmit data over the wired connection path 20) **and a first change-over switch for switching between wireless data communication using said first wireless communication unit and wired data communication using said first wired communication unit** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection; such switch may be implement in software, which functions just like the change-over procedures); **a first wired connection detecting section for detecting whether or not a wired connection for said wired data communication exists between said first wired communication unit and a second wired communication unit** (see Figure 4 Element 42, [0079] i.e. as indicated by the paragraph [0079], the detachment detector detects whether the display device is connected to the processing device or in another word it detects whether a

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wired connection between the two devices exists); **an application for detecting a wireless connection** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection); **wherein said first wired communication unit and said second wired communication unit communicate using said wired data communication after said first change-over switch and said second change-over switch have been switched to said wired data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wired connection mode for it to communicate in the wired communication); **and wherein said first wireless communication unit and said second wireless communication unit communicate using said wireless data communication after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wireless connection mode for it to communicate in the wireless communication).

However, Moriyama does not teach that **a connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit, and 2) responsive**

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to said application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit. Dorenbosch from the same field of endeavor teach that **a connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit** (see Abstract, Figures 1 and 2, Paragraphs [0030-0036] e.g. figure 2 and paragraphs [0034] and [0036]), **and 2) responsive to said application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit** (see paragraphs [0035] and [0036]). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching mechanism (applying the concept of choosing a “better” connection to switch to) as disclosed by Dorenbosch with Moriyama. The motivation would have been that it is desired to provide a better connection between two communication devices to ensure the integrity of time critical traffic (see Dorenbosch, paragraphs [0017]).

Still regarding Claim 4, Moriyama and Dorenbosch teach all the limitations in claim 4 except that **wherein said first wired communication unit and said second wired communication unit begin to communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped; and wherein said first wireless communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication and b) after wired data communication between said first wired unit and said second wired unit has stopped.** Even so, the combined teaching of Moriyama and Dorenbosch is sufficient for an ordinary skilled artisan to realize the particular features even it does not specifically teach the features.

Jones from the same field of endeavor helps to make the particular features clear. Jones teaches that **wherein said first wired communication unit and said second wired communication unit begin to communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication** (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wired hardware and column 9 lines 20 to 67 items 7), 10) and 11); the transition from wireless communication to wired communication requires

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activating the wired hardware) **and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wireless hardware 1004 and column 9 lines 20 to 67 items 7), 10) and 11); to complete the transition from wireless communication to wired communication, deactivating the wireless hardware is further needed; as a result, only the wired medium is available, thus communication is carried out in the wired medium only); **and wherein said first wireless communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wireless hardware and column 9 lines 20 to 67 items 5), 10) and 12); the transition from wired communication to wireless communication requires activating the wireless hardware) **and b) after wired data communication between said first wired unit and said second wired unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wired hardware 1003 and column 9 lines 20 to 67 items 5), 10) and 12); to complete the transition from wired communication to wireless communication, deactivating the wired hardware is further needed; as a result, only the wired medium is available, thus communication is carried out in the wireless medium only). At the time of the invention, it would have been obvious to a person ordinary

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skill in the art to implement the switching apparatus and method disclosed by Jones with Moriyama's system, specifically on both the PC/cradle and monitor. The rationale would have been that it is desired to make automatic switching between wired and wireless mediums more robust.

Regarding Claim 6, Moriyama teaches that **A wireless communication unit** (see Abstract, Figure 2, [0002] [0011-0013] [0071]), **comprising: a second communication unit** (see Figures 4 and 5, [0078] [0080] e.g. the cradle and/or the display device) **including: a second wireless communication unit for performing wireless data communication with said first wireless unit** (see Figure 5 Elements 30 and 53, [0081] i.e. the wireless communication device 53 receives data from the wireless communication device 16 in the processing apparatus over the wireless connecting path 30), **a second wired communication unit for performing wired data communication with said first wired communication unit** (see Figure 5 Elements 20 and 52, [0081] i.e. the wired communication device 52 receives data from the wired communication device 15 in the processing apparatus over the wired connection path 20), **and a second change-over switch for switching between wireless data communication using said second wireless communication unit and wired data communication using said second wired communication unit** (see Figures 13, 14 and 15, [0074] [0082] [0105] [0106] [0109] i.e. as indicated by the paragraphs [0074] and [0082] the detachment detector in the display device 50 determines whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 13, 14 and 15 to shift to the wireless connection; such switch may be implement in software, which functions just like the change-over procedures), **a first wired**

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connection detecting section for detecting whether or not a wired connection for said wired data communication exists between a first wired communication unit and said second wired communication unit (see Figure 4 Element 42, [0079] i.e. as indicated by the paragraph [0079], the detachment detector detects whether the display device is connected to the processing device or in another word it detects whether a wired connection between the two devices exists); **an application for detecting a wireless connection** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection); **wherein said first wired communication unit and said second wired communication unit communicate using said wired data communication after said first change-over switch and said second change-over switch have been switched to said wired data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wired connection mode for it to communicate in the wired communication); **and wherein said first wireless communication unit and said second wireless communication unit communicate using said wireless data communication after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wireless connection mode for it to communicate in the wireless communication).

However, Moriyama does not teach that **a connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between**

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said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit, and 2) responsive to said application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit. Dorenbosch from the same field of endeavor teach that **a connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit** (see Abstract, Figure 1 and 2 and Paragraphs [0030-0036] e.g. figure 2 and paragraphs [0034] and [0036]), **and 2) responsive to said application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit** (see paragraphs [0035] and [0036]). At the time of the invention, it would have been obvious to a person ordinary skill

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in the art to implement the switching mechanism (applying the concept of choosing a “better” connection to switch to) as disclosed by Dorenbosch with Moriyama. The motivation would have been that it is desired to provide a better connection between two communication devices to ensure the integrity of time critical traffic (see Dorenbosch, paragraphs [0017]).

Still regarding Claim 6, Moriyama and Dorenbosch teach all the limitations in claim 6 except that **wherein said first wired communication unit and said second wired communication unit begin to communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped; and wherein said first wireless communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication and b) after wired data communication between said first wired unit and said second wired unit has stopped.** Even so, the combined teaching of Moriyama and Dorenbosch is sufficient for an ordinary skilled artisan to realize the particular features even it does not specifically teach the features.

Jones from the same field of endeavor helps to make the particular features clear. Jones teaches that **wherein said first wired communication unit and said second wired communication unit begin to communicate using said wired data communication a) after said first change-**

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over switch and said second change-over switch have been switched to said wired data communication (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wired hardware and column 9 lines 20 to 67 items 7), 10) and 11); the transition from wireless communication to wired communication requires activating the wired hardware) **and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wireless hardware 1004 and column 9 lines 20 to 67 items 7), 10) and 11); to complete the transition from wireless communication to wired communication, deactivating the wireless hardware is further needed; as a result, only the wired medium is available, thus communication is carried out in the wired medium only); **and wherein said first wireless communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wireless hardware and column 9 lines 20 to 67 items 5), 10) and 12); the transition from wired communication to wireless communication requires activating the wireless hardware) **and b) after wired data communication between said first wired unit and said second wired unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35

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to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wired hardware 1003 and column 9 lines 20 to 67 items 5), 10) and 12); to complete the transition from wired communication to wireless communication, deactivating the wired hardware is further needed; as a result, only the wired medium is available, thus communication is carried out in the wireless medium only). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching apparatus and method disclosed by Jones with Moriyama's system, specifically on both the PC/cradle and monitor. The rationale would have been that it is desired to make automatic switching between wired and wireless mediums more robust.

Regarding Claim 8, it is a method claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 9, it is a method claim corresponding to the apparatus claim 4, and therefore rejected under the same reason set forth in the same section of claim 4 in this paragraph.

Regarding Claim 10, it is a method claim corresponding to the apparatus claim 6, and therefore rejected under the same reason set forth in the same section of claim 6 in this paragraph.

Regarding Claim 11, it is a computer readable medium claim corresponding to the method claim 8, and therefore rejected under the same reason set forth in the same section of claim 8 in this paragraph.

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Regarding Claim 12, it is a computer readable medium claim corresponding to the method claim 9, and therefore rejected under the same reason set forth in the same section of claim 9 in this paragraph.

Regarding Claim 13, it is a computer readable medium claim corresponding to the method claim 10, and therefore rejected under the same reason set forth in the same section of claim 10 in this paragraph.

Regarding Claims 16, the Dorenbosch further teaches that **wherein: said first communication unit is further for signaling said second communication unit through said wired data communication said second communication unit is further fore responding to said signaling from said first communication through said wired data communication with an address corresponding to said second communication unit; and said first communication unit is further for establishing a link between said fist communication unit and said second communication unit based on said address provided by said second communication unit** (see Paragraphs [0030-0034]). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching mechanism (applying the concept of choosing a “better” connection to switch to) as disclosed by Dorenbosch with Moriyama. The motivation would have been that it is desired to provide a better connection between two communication devices to ensure the integrity of time critical traffic (see Dorenbosch, paragraphs [0017]).

Regarding Claim 17, Moriyama teaches that **wherein said second communication unit further includes: a second wired connection section for detecting whether or not said wired connection for said wired data communication exists between said first wired communication unit and said second wired communication unit** (see Figure 5 Element 58, [0082] i.e. as indicated by the paragraph [0082], the detachment detector detects whether the display device is connected to the processing device or in another word it detects whether a wired connection between the two devices exists); **a further application for detecting said wireless connection** (see Figures 13, 14 and 15, [0074] [0082] [0105] [0106] [0109] i.e. as indicated by the paragraphs [0074] and [0082] the detachment detector in the display device 50 determines whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 13, 14 and 15 to shift to the wireless connection). However, Moriyama does not teach that **a further control second section which: 1) responsive to said second wired connection detection second detecting that said wired connection between said first wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said first change-over switch to switch from a) said wireless data communication using said first wireless communication unit to b) said wired data communication using said first wired communication unit, and 2) responsive to said further application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said first change over-switch to switch from a) said wired data communication using said first wired communication unit to b) said wireless data**

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communication using said first wireless communication unit. Dorenbosch from the same field of endeavor teach that **a further control second section which: 1) responsive to said second wired connection detection second detecting that said wired connection between said first wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said first change-over switch to switch from a) said wireless data communication using said first wireless communication unit to b) said wired data communication using said first wired communication unit** (see Abstract, Figure 1 and 2 and Paragraphs [0030-0036] e.g. figure 2 and paragraphs [0034] and [0036]), **and 2) responsive to said further application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said first change over-switch to switch from a) said wired data communication using said first wired communication unit to b) said wireless data communication using said first wireless communication unit** (see paragraphs [0035] and [0036]). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching mechanism (applying the concept of choosing a “better” connection to switch to) as disclosed by Dorenbosch with Moriyama. The motivation would have been that it is desired to provide a better connection between two communication devices to ensure the integrity of time critical traffic (see Dorenbosch, paragraphs [0017]).

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al, U.S. Publication No. 2004/0198430 (hereinafter Moriyama) in view of Dorenbosch et al, U.S. Publication No. 2004/0028009 (hereinafter Dorenbosch) and Jones et al, U.S. Patent No.

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6137802 (hereinafter Jones) as applied to claim 1 above, and further in view of Fong, U.S. Publication No. 2005/0249169.

Regarding Claim 3, Moriyama, Dorenbosch and Jones teach all the limitations except that **the wireless communication system, wherein the first communication unit further includes a first signal level adjusting unit configured to adjust, when the first wired connection detecting section detects that the wired connection is being performed, a signal level so that the wired data communication is performed using a signal level smaller than the signal level necessary for the wireless data communication.** Fong from the same field of endeavor teach that **the wireless communication system, wherein the first communication unit further includes a first signal level adjusting unit configured to adjust, when the first wired connection detecting section detects that the wired connection is being performed, a signal level so that the wired data communication is performed using a signal level smaller than the signal level necessary for the wireless data communication** (see Abstract, [0040] i.e. a wired communication link is generally more stable than a wireless link, thus for a system, which is able to select either one for communication and adjust signal strength, it is obvious to adjust signal strength so that wireless has greater value). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the signal level adjustment mechanism to a system with communication medium selection mechanism. The rationale would have been that with signal strength adjustment mechanism, the communication medium selection mechanism can yield more efficient and optimal medium communication medium for communication.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al, U.S. Publication No. 2004/0198430 (hereinafter Moriyama) in view of Lempio et al, U.S. Publication No. 2003/0207683 (hereinafter Lempio), Dorenbosch et al, U.S. Publication No. 2004/0028009 (hereinafter Dorenbosch) and Jones et al, U.S. Patent No. 6137802 (hereinafter Jones).

Regarding Claim 15, Moriyama teaches that **A wireless communication unit** (see Abstract, Figure 2, [0002] [0011-0013] [0071]), **comprising: a first communication unit including: a first wireless communication unit** (see Figure 3, [0072-0073] e.g. the processing apparatus) **for performing wireless data communication** (see Figure 3 Element 16 and 30, [0076-0077] i.e. the wireless communication device 16 transmits data over the wireless connection path 30), **a first wired communication unit for performing wired data communication** (see Figure 3 Elements 15 and 20, [0075] [0077] i.e. the wired communication device 15 transmit data over the wired connection path 20) **and a first change-over switch for switching between wireless data communication using said first wireless communication unit and wired data communication using said first wired communication unit** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection; such switch may be implement in software, which functions just like the change-over procedures); **a first wired connection detecting section for detecting whether or**

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not a wired connection for said wired data communication exists between said first wired communication unit and said second wired communication unit (see Figure 4 Element 42, [0079] i.e. as indicated by the paragraph [0079], the detachment detector detects whether the display device is connected to the processing device or in another word it detects whether a wired connection between the two devices exists); **an application for detecting a wireless connection** (see Figures 6, 7 and 9, [0074] [0079] [0084] [0086] [0093] i.e. as indicated by the paragraphs [0074] and [0079] the processing device 10 may include a detachment detector to determine whether a wired connection is still on and invokes the change-over mean/procedures as shown in figures 6, 7 and 9 to shift to the wireless connection); **wherein said first wired communication unit and said second wired communication unit communicate using said wired data communication after said first change-over switch and said second change-over switch have been switched to said wired data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wired connection mode for it to communicate in the wired communication); **and wherein said first wireless communication unit and said second wireless communication unit communicate using said wireless data communication after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Figures 6 and 13 i.e. the figures suggest that either side has to switch to wireless connection mode for it to communicate in the wireless communication); **wherein, (1) when the first wired connection detecting unit detects the wired connection is being performed, the first change-over unit changes over so that the wired data communication is performed, and using the wired connection detected by the first wired connection detecting unit, gives a change-over instruction to second change-over**

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unit, which is configured to change changes over whether the wireless data communication should be performed using second wireless communication unit configured to perform that performs the wireless data communication with the first wireless communication unit or the wired data communication should be performed using the second wired communication unit, to change over so that the wired data communication is performed (see Figures 6, 7, 9, 13, 14 and 15, [0074] [0079] [0082] [0084] [0086] [0093] [0105] [0106] [0109] i.e. according to paragraphs [0079] (and [0082]) in Moriyama's disclosure, it states that "... the CPU 11 of the processing apparatus 10 need only periodically exchange information with the display device 50, via the wired data transfer line 21, to determine whether the wired image transfer line 22 is connected ..."; in other words, the processing apparatus including the CPU 11, the detector 42, display device control software/connection mode switching process and etc., which acts a first change-over unit to make the shifting, exchanges (meaning sending and receiving) information regarding the connectivity of the wired communication line, between the display device including connector 51, connection mode switching process and etc., which also acts as a second change-over unit). However, Moriyama does not teach that **a connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit, and 2) responsive to said application detecting that said wireless connection between said first wireless communication unit and said second wireless**

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communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit. Dorenbosch from the same field of endeavor teach that a **connection control section which: 1) responsive to said first wired connection detecting section detecting that said wired connection between said wired communication unit and said second wired communication unit exists, uses said wireless data communication to signal said second change-over switch to switch from a) said wireless data communication using said second wireless communication unit to b) said wired data communication using said second wired communication unit** (see Abstract, Figures 1, 2 and 6, Paragraphs [0030-0034] [0042-0044] [0047-0048] e.g. figures 2 and 6, paragraphs [0034] and [0048]), **and 2) responsive to said application detecting that said wireless connection between said first wireless communication unit and said second wireless communication unit exists, uses said wired data communication to signal said second change-over switch to switch from a) said wired data communication using said second wired communication unit to b) said wireless data communication using said second wireless communication unit** (see paragraphs [0035] and [0048]). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching mechanism (applying the concept of choosing a “better” connection to switch to) as disclosed by Dorenbosch with Moriyama. The motivation would have been that it is desired to provide a better connection between two communication devices to ensure the integrity of time critical traffic (see Dorenbosch, paragraphs [0017]).

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Still regarding Claim 15, Moriyama and Dorenbosch teach all the limitations in claim 15 except that (2) when third wired connection detecting unit, which is configured to detect whether or not the wired connection is being performed between the first wired communication unit and third wired communication unit configured to perform wired data communication with the first wired communication unit using a wired connection, detects that the wired connection is being performed, third change over unit, which is configured to change changes over whether the wireless data communication should be performed using third wireless communication unit configured to perform the wireless data communication with the first wireless communication unit or the wired data communication should be performed using the third wired communication unit, changes over so that the wired data communication is performed using the third wired communication unit, and using the detected wired connection, gives a change-over instruction to the first change-over unit, to change over so that the wired data communication is performed, and the first change-over unit changes over, based on the change-over instruction given by the third change over unit, so that the wired data communication is performed. Lempio from the same field of endeavor teaches that (2) when third wired connection detecting unit, which is configured to detect whether or not the wired connection is being performed between the first wired communication unit and third wired communication unit configured to perform wired data communication with the first wired communication unit using a wired connection, detects that the wired connection is being performed, third change over unit, which is configured to change changes over whether the wireless data communication should be performed using third wireless communication unit configured to perform the wireless data

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communication with the first wireless communication unit or the wired data communication should be performed using the third wired communication unit, changes over so that the wired data communication is performed using the third wired communication unit, and using the detected wired connection, gives a change-over instruction to the first change-over unit, to change over so that the wired data communication is performed, and the first change-over unit changes over, based on the change-over instruction given by the third change over unit, so that the wired data communication is performed (see Abstract, Figures 1, 3 and 4, [0029-0030] [0032] [0035] i.e. the invention of Lempio suggests that the processing apparatus, which utilize the WLAN technology such as 802.11, is able to connect to more than one display devices). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the capability of the access point of the Lempio's invention with the processing apparatus of Moriyama to accommodate multiple display devices. The rationale would have been that it is desired to allow the accommodation of multiple display devices to fully utilize the service provided by the processing apparatus.

Still regarding Claim 15, Moriyama, Dorenbosch and Lempio teach all the limitations in claim 15 except that **wherein said first wired communication unit and said second wired communication unit begin to communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped; and wherein said first wireless**

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communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication and b) after wired data communication between said first wired unit and said second wired unit has stopped. Even so, the combined teaching of Moriyama and Dorenbosch is sufficient for an ordinary skilled artisan to realize the particular features even it does not specifically teach the features.

Jones from the same field of endeavor helps to make the particular features clear. Jones teaches that **wherein said first wired communication unit and said second wired communication unit begin to communicate using said wired data communication a) after said first change-over switch and said second change-over switch have been switched to said wired data communication** (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wired hardware and column 9 lines 20 to 67 items 7), 10) and 11); the transition from wireless communication to wired communication requires activating the wired hardware) **and b) after wireless data communication between said first wireless unit and said second wireless unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wireless hardware 1004 and column 9 lines 20 to 67 items 7), 10) and 11); to complete the transition from wireless communication to wired communication, deactivating the wireless hardware is further needed; as

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a result, only the wired medium is available, thus communication is carried out in the wired medium only); **and wherein said first wireless communication unit and said second wireless communication unit begin to communicate using said wireless data communication a) after said first change-over switch and said second change-over switch have been switched to said wireless data communication** (see Abstract, Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 steps 704-activate wireless hardware and column 9 lines 20 to 67 items 5), 10) and 12); the transition from wired communication to wireless communication requires activating the wireless hardware) **and b) after wired data communication between said first wired unit and said second wired unit has stopped** (see Figures 4, 6 and 10, Column 2 Lines 19 to 48, Column 5 Lines 54 to 67, Column 6 Lines 1 to 36, Column 7 Lines 35 to 60, Column 8 lines 65 to 67 and Column 9; e.g. figure 4 step deactivate wired hardware 1003 and column 9 lines 20 to 67 items 5), 10) and 12); to complete the transition from wired communication to wireless communication, deactivating the wired hardware is further needed; as a result, only the wired medium is available, thus communication is carried out in the wireless medium only). At the time of the invention, it would have been obvious to a person ordinary skill in the art to implement the switching apparatus and method disclosed by Jones with Moriyama's system, specifically on both the PC/cradle and monitor. The rationale would have been that it is desired to make automatic switching between wired and wireless mediums more robust.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEI-PO KAO whose telephone number is (571)270-3128. The examiner can normally be reached on Monday through Friday, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit

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Examiner, Art Unit 2464